

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

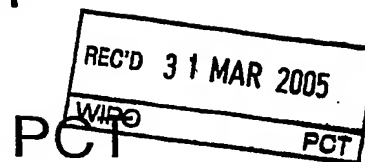
Applicant's or agent's file reference PD030106	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/010232	International filing date (<i>day/month/year</i>) 13 September 2004 (13.09.2004)	Priority date (<i>day/month/year</i>) 14 October 2003 (14.10.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant THOMSON LICENSING		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 8 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 18 April 2006 (18.04.2006)</p> <p>Authorized officer <div style="text-align: center;">Ellen Moyse</div></p> <p>Telephone No. +41 22 338 89 75</p>
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY



To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/010232

International filing date (day/month/year)
13.09.2004

Priority date (day/month/year)
14.10.2003

International Patent Classification (IPC) or both national classification and IPC
G11B19/20

Applicant
THOMSON LICENSING S.A.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 56.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/010232

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/010232

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☐ paid additional fees.
 - ☒ paid additional fees under protest.
 - ☐ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☒ complied with
 - ☐ not complied with for the following reasons:
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
 - ☐ the parts relating to claims Nos.

Box No. V Reasoned statement under Rule 43b/s.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

1. Reference is made to the following document:

D1 : WO 02/089132 A (KONINKL PHILIPS ELECTRONICS NV) 7 November 2002
(2002-11-07)

2. Document D1, which is considered to represent the most relevant state of the art, discloses:

a turntable designed to be press-fitted to the spindle of the motor of a disk drive for removable media. The bore of the turntable is larger than the spindle over most of its length, but there are two waisted areas at either end which fit tightly to the spindle. The turntable is designed to fit perpendicularly to the spindle with no adjustment.

From this, the subject-matter of independent claim 1 differs in that:

the bore is greater than the spindle diameter over the whole length, allowing adjustment of both centre and attitude of the turntable.

2.1 The subject-matter of claim 1 is therefore novel (Article 33(2) PCT) The problem to be solved by the present invention may be regarded as:

producing a turntable for a disk drive for removable media which can be adjusted for centre and attitude before being fixed to the spindle.

2.2 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

the prior art discloses a design specifically intended to eliminate the possibility of adjustment by ensuring the turntable fits perpendicularly to the spindle. The matter of claim 1 is not obvious from this starting point.

2.3 Claims 2-5 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

3 Document D1, which is considered to represent the most relevant state of the art, discloses:

a turntable designed to be press-fitted to the spindle of the motor of a disk drive for removable media. The bore of the turntable is larger than the spindle over most of its length, but there are two waisted areas at either end which fit tightly to the spindle. The turntable is designed to fit perpendicularly to the spindle with no adjustment.

From this, the subject-matter of independent claim 6 differs in that:

the turntable is formed in two or more parts, in such a way as to allow adjustment of both centre and attitude of the turntable.

3.1

The subject-matter of claim 6 is therefore novel (Article 33(2) PCT) The problem to be solved by the present invention may be regarded as:

producing a turntable for a disk drive for removable media which can be adjusted for centre and attitude before being fixed to the spindle.

3.2 The solution to this problem proposed in claim 6 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

the prior art discloses a design specifically intended to eliminate the possibility of adjustment by ensuring the turntable fits perpendicularly to the spindle. The matter of claim 1 is not obvious from this starting point.

4 Document D1, which is considered to represent the most relevant state of the art, discloses:

A method of press-fitting a turntable to the spindle of the motor of a disk drive for

removable media in such way that the turntable fits perpendicularly to the spindle with no adjustment and no adhesive, as the bore of the turntable is larger than the spindle over most of its length, but there are two waisted areas at either end which fit tightly to the spindle.

From this, the subject-matter of independent claim 7 differs in that:
it describes a method which further comprises the steps of adjusting the turntable for centre and inclination, followed by a step of fixing.

4.1 The subject-matter of claim 7 is therefore novel (Article 33(2) PCT) The problem to be solved by the present invention may be regarded as:

providing a method of centreing, adjustment of inclination and fixing of a turntable to the spindle motor of a disk drive for removable media.

4.2 The solution to this problem proposed in claim 7 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

it is not obvious starting from the closest prior art to apply such a method.

5. Document D1, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):

A method of press-fitting a turntable to the spindle of the motor of a disk drive for removable media in such way that the turntable fits perpendicularly to the spindle with no adjustment and no adhesive, as the bore of the turntable is larger than the spindle over most of its length, but there are two waisted areas at either end which fit tightly to the spindle.

From this, the subject-matter of independent claim 8 differs in that:

it describes a method which further comprises the steps of adjusting the turntable for centre and inclination, specifically directed to the embodiment of claim 6, where the turntable is in 2 or more parts, followed by a step of fixing.

5.1 The subject-matter of claim 8 is therefore novel (Article 33(2) PCT) The problem to be solved by the present invention may be regarded as:

providing a method of centreing, adjustment of inclination and fixing of a turntable to the spindle motor of a disk drive for removable media.

5.2 The solution to this problem proposed in claim 8 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

it is not obvious starting from the closest prior art to apply such a method.

6. Document D1, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):

A disk drive for removable media characterised by a turntable designed to be press-fitted to the spindle of the motor. The bore of the turntable is larger than the spindle over most of its length, but there are two waisted areas at either end which fit tightly to the spindle. The turntable is designed to fit perpendicularly to the spindle with no adjustment.

From this, the subject-matter of independent claim 9 differs in that:

it refers to a disk drive for removable media characterised by a turntable as claimed in claims 1 to 6

6.1 The subject-matter of claim 9 is therefore novel (Article 33(2) PCT) The problem to be solved by the present invention may be regarded as:

see section 2.1

6.2 The solution to this problem proposed in claim 9 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

see section 2.2